FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: February 14, 1996 Date Received: February 8, 1996

Project: Metro Self Monitor, PO #M52200 Date Samples Extracted: February 9, 1996 Date Extracts Analyzed: February 13, 1996

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC USING METHOD 6010

Samples Processed Using Method 3005 Results Reported as mg/L (ppm)

Sample ID		Chromium	Copper	<u>Nickel</u>	Zinc
M52200		0.79	0.89	0.66	0.17
Method Blan	k	< 0.05	<0.05	< 0.05	< 0.05

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QUALITY ASSURANCE RESULTS FOR CHROMIUM, COPPER, NICKEL, AND ZINC Samples Processed Using Method 3005

Laboratory Code: 66464DU

	Reporting	Sample	Duplicate		Acceptance
Analyte:	Units	Result	<u>Result</u>	Difference	<u>Criteria</u>
Chromium	mg/L (ppm)	0.79	0.79	0	0-20
Copper	mg/L (ppm)	0.89	0.89	0	0-20
Nickel	mg/L (ppm)	0.66	0.65	2	0-20
Zinc	mg/L (ppm)	0.17	0.16	6 a	0-20

Laboratory Code: 66464MS/MSd

							Relative
	Reporting	Spike	Sample	%	Recovery	Acceptance	Percent
Analyte:	Units	Level	Result	MS	MSD	Criteria	Difference
Chromium	mg/L (ppm)	5	0.79	100	104	80-120	4
Copper	mg/L (ppm)	5	0.89	104	110	80-120	6
Nickel	mg/L (ppm)	10	0.66	103	104	80-120	1
Zinc	mg/L (ppm)	5	0.17	99	100	80-120	1

Laboratory Code: Spike Blank

	Reporting	Spike	% Rec	covery	Acceptanc	Relative e Percent
Analyte:	Units	Level	MS	MSD	Criteria	Difference
Chromium	mg/L (ppm)	5	104	100	80-120	4
Copper	mg/L (ppm)	5	108	105	80-120	3
Nickel	mg/L (ppm)	10	107	102	80-120	5
Zinc	mg/L (ppm)	5	101	98	80-120	3

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

SAMPLE CHAIN OF CUSTODY

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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

February 14, 1996

INVOICE # 96ACU0214-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M52200: Results of testing requested by Gerry Thompson, Project Manager for material submitted on February 8, 1996.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$65 per sample \$ 65.00

Amount Due \$ 65.00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

February 14, 1996

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on February 8, 1996 from your Metro Self Monitor, PO #M52200 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson

Chemist

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Enclosures

FAX: 382-7335 ACU0214R.DOC